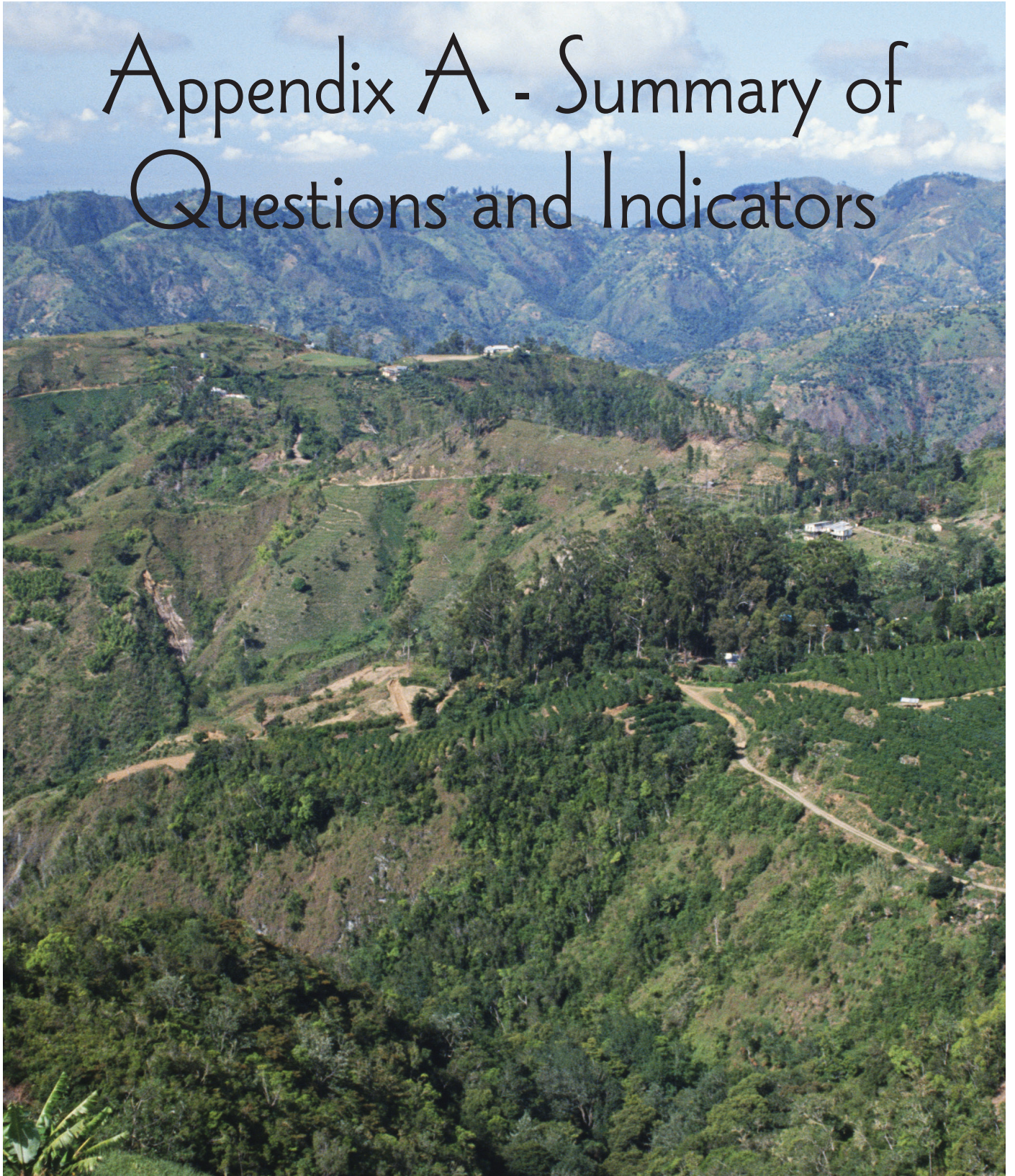


Appendix A - Summary of Questions and Indicators



Cleaner Air - Summary of Questions and Indicators

Outdoor Air Quality		
Question	Indicator Name	Technical Document Reference
What is the quality of outdoor air in the United States?	Number and percentage of days that Metropolitan Statistical Areas have Air Quality Index (AQI) values greater than 100	1.1.1
	Number of people living in areas with air quality levels above the National Ambient Air Quality Standards (NAAQS) for ozone (8-hour) and Particulate Matter (PM _{2.5})	1.1.1.a
	Ambient concentrations of ozone, 8-hour	1.1.1.b
	Ambient concentrations of particulate matter (PM _{2.5})	1.1.1.b
	Visibility	1.1.1.c
	Deposition: wet sulfate and wet nitrogen	1.2.1
	Ambient concentrations of selected air toxics	1.1.1.d
What contributes to outdoor air pollution?	Emissions of particulate matter, sulfur dioxide, nitrogen oxides, and volatile organic compounds	1.1.2.a
	Lead emissions	1.1.2.a
	Air toxics emissions	1.1.2.b
	Emissions (utility): sulfur dioxide and nitrogen oxides	1.2.2
What human health effects are associated with outdoor air pollution?	No indicator identified. Also see Human Health Chapter.	1.1.3
What ecological effects are associated with outdoor air pollution?	No indicator identified. Also see Ecological Condition Chapter.	1.1.4 & 1.2.3
Indoor Air Quality		
What is the quality of the air in buildings in the United States?	U.S. homes above EPA's radon action levels	1.3.1
	Percentage of homes where young children are exposed to environmental tobacco smoke	1.3.1
What contributes to indoor air pollution?	No indicator identified	1.3.2
What human health effects are associated with indoor air pollution?	No indicator identified	1.3.3
Global Issues		
What is happening to the Earth's ozone layer?	Ozone levels over North America	1.4.1
What is causing changes to the ozone layer?	Worldwide and U.S. production of ozone-depleting substances	1.4.2
What human health and ecological effects are associated with stratospheric ozone depletion?	No indicator identified	1.4.3 & 1.4.4

Appendix A - Summary of Questions and Indicators

Purer Water - Summary of Questions and Indicators

Waters and Watersheds		
Question	Indicator Name	Technical Document Reference
What is the condition of waters and watersheds in the United States?	No indicator identified	2.2.1
What is the condition of coastal waters?	Water clarity in coastal waters	2.2.3
	Dissolved oxygen in coastal waters	2.2.3
What are the extent and condition of wetlands?	Wetland extent and change	2.2.2
	Sources of wetland change/loss	2.2.2
What are stressors on waters and watersheds?	Altered fresh water ecosystems	2.2.1
	Percent urban land cover in riparian areas	2.2.4.a
	Agricultural land in riparian areas	2.2.4.a
	Changing stream flows	2.2.4.a
	Atmospheric deposition of nitrogen	2.2.4.b
	Nitrate in farmland, forested, and urban streams and ground water	2.2.4.b
	Total nitrogen in coastal waters	2.2.4.b
	Phosphorus in farmland, forested, and urban streams	2.2.4.b
	Total phosphorus in coastal waters	2.2.4.b
	Phosphorus in large rivers	2.2.4.b
	Atmospheric deposition of mercury	2.2.4.c
	Chemical contaminants in streams	2.2.4.c
	Sediment contamination of inland waters	2.2.4.c
	Sediment contamination of coastal waters	2.2.4.c
	Pesticides in farmland streams, and ground water	2.2.4.c
	Toxic releases to water of mercury, dioxin, lead, PCBs, and PBTs	2.2.4.c
What ecological effects are associated with impaired waters?	Benthic Community Index (coastal waters). Also see Ecological Condition Chapter.	2.2.5
Drinking Water		
What is the quality of drinking water?	Population served by community water systems that meet all health-based standards	2.3.1
What are sources of drinking water contamination?	No indicator identified	2.3.2
What human health effects are associated with drinking contaminated water?	No indicator identified. Also see Human Health Chapter.	2.3.3
Recreation in and on the Water		
What is the condition of waters supporting recreational use?	Number of beach days that beaches are closed or under advisory	2.4.1
What are sources of recreational water pollution?	No indicator identified. Also see Ecological Condition Chapter.	2.4.2
What human health effects are associated with recreation in contaminated waters?	No indicator identified. Also see Human Health Chapter.	2.4.3
Consumption of Fish and Shellfish		
What is the condition of waters that support consumption of fish and shellfish?	Percent of river miles and lake acres under fish consumption advisories	2.5.1
	Contaminants in fresh water fish	2.5.1
	Number of watersheds exceeding health-based national water quality criteria for mercury and PCBs in fish tissue	2.5.1
What are contaminants in fish and shellfish, and where do they originate?	No indicator identified	2.5.2
What human health effects are associated with consuming contaminated fish and shellfish?	No indicator identified	2.5.3

Appendix A - Summary of Questions and Indicators

Better Protected Land - Summary of Questions and Indicators

Land Use		
Question	Indicator Name	Technical Document Reference
What is the extent of developed lands?	Extent of developed lands	3.1.1
	Extent of urban and suburban lands	3.1.1
What is the extent of farmlands?	Extent of agricultural land uses	3.1.2
What is the extent of grasslands and shrublands?	Extent of grasslands and shrublands	3.1.3
What is the extent of forest lands?	Extent of forest area, ownership, and management	3.1.4
What human health effects are associated with land use?	No indicator identified	3.1.5
What ecological effects are associated with land use?	No indicator identified. Also see Ecological Condition Chapter.	3.1.6
Chemicals in the Landscape		
How much and what types of toxic substances are released into the environment?	Quantity and type of toxic chemicals released and managed	3.2.1
What are the volume, distribution, and extent of pesticide and fertilizer use?	Agricultural pesticide use	3.2.2
	Fertilizer use	3.2.3
What is the potential disposition of chemicals from land?	Pesticide residues in foods	3.2.4
	Potential pesticide runoff from farm fields	3.2.4
	Risk of nitrogen export	3.2.4
	Risk of phosphorus export	3.2.4
What human health effects are associated with pesticides, fertilizers, and toxic substances?	No indicator identified	3.2.5
What ecological effects are associated with pesticides, fertilizers, and toxic substances?	No indicator identified	3.2.6
Waste and Contaminated Lands		
How much and what types of waste are generated and managed?	Quantity of municipal solid waste (MSW) generated and managed	3.3.1
	Quantity of RCRA hazardous waste generated and managed	3.3.1
	Quantity of radioactive waste generated and in inventory	3.3.1
What is the extent of land used for waste management?	Number and location of municipal solid waste (MSW) landfills	3.3.2
	Number of RCRA hazardous waste management facilities	3.3.2
What is the extent of contaminated lands?	Number and location of Superfund National Priority List (NPL) sites	3.3.3
	Number and location of RCRA Corrective Action sites	3.3.3
What human health effects are associated with waste management and contaminated lands?	No indicator identified	3.3.4
What ecological effects are associated with waste management and contaminated lands?	No indicator identified	3.3.5

Appendix A - Summary of Questions and Indicators

Human Health - Summary of Questions and Indicators

Health Status of the United States		
Question	Indicator Name	Technical Document Reference
What are the trends and indicators for health and disease in the United States?	Life expectancy	4.3.1
	Cancer incidence	4.3.2
	Cancer mortality	4.3.2
	Cardiovascular disease mortality	4.3.2
	Cardiovascular disease prevalence	4.3.2
	Chronic obstructive pulmonary disease mortality	4.3.2
	Asthma mortality	4.3.2
	Asthma prevalence	4.3.2
	Cholera prevalence	4.3.3
	Cryptosporidiosis prevalence	4.3.3
	<i>E. coli</i> O157:H7 prevalence	4.3.3
	Hepatitis A prevalence	4.3.3
	Salmonellosis prevalence	4.3.3
	Typhoid Fever prevalence	4.3.3
	Shigellosis prevalence	4.3.3
What are the trends for children's environmental health issues?	Infant mortality	4.3.4
	Low birthweight incidence	4.3.4
	Childhood cancer mortality	4.3.4
	Childhood cancer incidence	4.3.4
	Childhood asthma mortality	4.3.4
	Childhood asthma prevalence	4.3.4
	Deaths due to birth defects	4.3.4
	Birth defect incidence	4.3.4
Environmental Pollution and Disease		
What is the role of the environment in disease?	Blood lead level	4.4.3
	Cardiovascular disease mortality	4.3.2
	Chronic obstructive pulmonary disease mortality	4.3.2
	Cholera prevalence	4.3.3
	Typhoid fever prevalence	4.3.3
Measuring Exposure to Environmental Pollution		
How can exposure data advance understanding of the role of the environment in disease?	Blood lead level	4.4.3
	Blood mercury level	4.4.3
	Blood cotinine level	4.4.4
	Urine organophosphate level to indicate pesticides	4.4.6

Appendix A - Summary of Questions and Indicators

Ecological Condition - Summary of Questions and Indicators

National Ecological Condition		
Question	Indicator Name	Technical Document Reference
What is the ecological condition of the United States?		5.8
Landscape Condition	Extent of ecosystem/land cover types (forests, farmlands, urban/suburban, grasslands/shrublands, fresh waters, coasts and oceans)	3.1.1, 3.1.2, 3.1.3, 3.1.4, 5.6, 5.7
Biotic Condition	At-risk native species	5.8
	Benthic Community Index	5.7
	Populations trends of invasive and native non-invasive bird species	5.4
	Tree condition	5.2
Chemical and Physical Characteristics	Nitrate levels in streams by ecosystems	2.2.4.b
Ecological Processes	Terrestrial Plant Growth Index	5.8
	Movement of nitrogen	5.8
Hydrology and Geomorphology	Changing stream flows	2.2.4.a
	Soil erosion	5.2, 5.3
Natural Disturbance Regimes	Forest disturbances: fire, insects, and disease	5.2

Appendix A - Summary of Questions and Indicators